

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 9617
ORDER NO. R-8917

APPLICATION OF CURRY AND THORNTON
FOR AN UNORTHODOX OIL WELL LOCATION
AND A NON-STANDARD PRORATION UNIT,
CHAVES COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 1, 1989, at Santa Fe, New Mexico, before Examiner Victor T. Lyon.

NOW, on this 19th day of April, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Curry and Thornton, owns the leasehold on the W/2 of Section 9, Township 14 South, Range 29 East, NMPM, Chaves County, New Mexico and desires to drill a well thereon for a non-standard unit consisting of the E/2 W/2 of said Section 9 at an unorthodox location 1980 feet from the South line and 2475 feet from the West line (Unit K) of said Section 9 in the King Camp-Devonian Pool.

(3) Santa Fe Exploration and Exxon USA appeared at the hearing and opposed the subject application on the basis that the unorthodox location would impair correlative rights; and, if granted, a penalty should be assessed based upon an estimate of pool reserves under each tract.

(4) The discovery well was drilled by Santa Fe Exploration at a standard location 1980 feet from the South and East lines of said Section 9.

(5) Special pool rules for said pool were promulgated by Order No. R-8806 after the hearing held in November, 1988 in Case No. 9529, and provided for 160-acre spacing and proration units consisting of a governmental quarter section with the well to be located not less than 660 feet from the unit boundary, nor less than 330 feet from an inner quarter-quarter section line, nor less than 1320 feet from the nearest well completed in said pool.

(6) Evidence was introduced in Case No. 9529 that there is a fault, down-thrown to the west, which traverses the W/2 of said Section 9 in generally a north-south direction continuing southward across Section 16. Additional evidence was introduced in this case which substantiates the existence of the fault.

(7) Santa Fe Exploration drilled a well east of the fault described above which was dry at a standard location 660 feet from the North line and 1980 feet from the East line of Section 16, one-half mile south of the discovery well. The revised geologic interpretation shows a second fault separating the second well from the first.

(8) Evidence indicates that approximately 60 acres east of the fault in the E/2 W/2 of Section 9 is potentially productive, and the applicant is entitled to drill a well to recover the reserves.

(9) A non-standard proration unit consisting of the E/2 W/2 would permit applicant to drill a single well to recover the oil under his lease, whereas two wells drilled for the NW/4 and SW/4 would be uneconomic, unnecessary and would cause waste from drilling an unnecessary well.

(10) There is inadequate data available to make an estimate of reserves with sufficient precision upon which a penalty could be assessed.

(11) Applicant requests an exception to two of the spacing requirements - the minimum distance from the outer boundary of the proration unit and the minimum distance between wells.

(12) Evidence at the hearing indicated that it is necessary to crowd the east line of the proration unit in order to avoid the fault but that a well could be drilled at the minimum distance from the nearest well.

(13) A penalty (P_1) should be assessed for crowding the east line of the unit in proportion to the distance moved from a standard location toward that line or $495/660 = 0.75$.

(14) A further penalty (P_2) should be assessed for crowding the nearest well in proportion to the distance the well is moved toward the nearest well from the minimum distance permitted, or $495/1320 = 0.375$.

(15) The combined penalties should be cumulative so that the proportion of the top allowable assigned at the proposed location would be $(1-P_1) \times (1-P_2)$, or $.25 \times .625 = .15625$.

(16) The distance moved toward the offsetting lease together with the depth of the well indicates a strong possibility the well may encroach even closer to the Santa Fe Exploration lease or even trespass on that lease, and therefore a continuous directional survey should be run on the well and a copy thereof filed with the Division so that the true location of the well at the productive interval can be determined.

(17) The penalty should be based upon the bottomhole location of the well using the procedure described in Finding Paragraphs (13) through (15), above.

(18) The drilling of the well with appropriate penalty as described above will afford the applicant the opportunity to produce its just and equitable share of the oil in the affected pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Curry and Thornton for an unorthodox oil well location for the North King Camp-Devonian Pool is hereby approved for a well to be located at a point 1980 feet from the South line and 2475 feet from the West line of Section 9, Township 14 South, Range 29 East, NMPM, Chaves County, New Mexico.

(2) The E/2 W/2 of said Section 9 shall be dedicated to the above-described well forming a 160-acre non-standard oil spacing and proration unit for said pool.

(3) A continuous directional survey shall be run on the well and filed with the Division so that the bottomhole location at the producing interval may be determined.

(4) The depth bracket allowable for the well shall be penalized by using the following formula, based on the bottomhole location of the well:

- a. a penalty (P_1) based on the proportion of distance the actual location is moved toward the boundary from the standard location;

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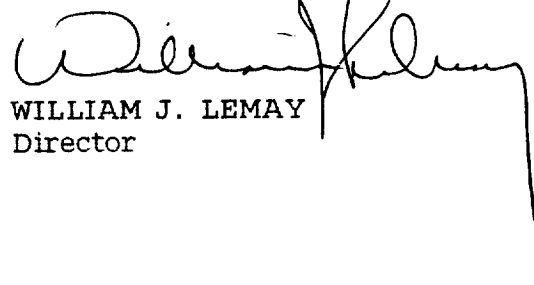
b. a penalty (P_2) based on the proportion of distance the actual location is moved toward the nearest well from the minimum distance under the pool rules; and

c. the product of $(1-P_1) \times (1-P_2)$.

(5) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read 'William J. Lemay', is written over the typed name. A long vertical line extends from the bottom of the signature.

WILLIAM J. LEMAY
Director

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